The mathematics program presents concepts that are introduced, developed or mastered throughout the elementary school years. Repetition throughout the year is needed to reinforce and build upon previously learned concepts. Problem solving is incorporated throughout the school year through each topic area.

Things you can do at Home to Support your Student

Parental Support

- Promote school attendance
- Support student responsibility
- Encourage mathematic awareness
- Participate in the educational process
- Communicate with the school

"Communication begins at home"

Revised 9/08

Manchester School District

A Parent's Guide to Elementary School Mathematics Curriculum

GRADE FIVE

Manchester School District
286 Commercial St.
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Phone: 603.624.6300

Elementary School Mathematics Grade 5

Trimester 1

EM Units- 1, 2, 3, 4

Number and Operations

- Identify, recognize, order and compare numbers to 9, 999,999
- Place value to ten-million
- Identify prime and composite numbers
- Multiplication of 2- and 3-digit numbers by 3-digits
- Divide whole numbers with divisors of 1- and 2-digits
- Multiplication and division facts to 144
- Order of operations
- Mental math of multiplication and division by tens, hundreds and thousands
- Mental math to compute change
- Mentally multiply 1 digit by 2 digits
- Estimation to solve problems and for reasonableness with whole numbers
- Field properties (commutative)
- Identify, order and compare equivalent decimals
- Identify, read and write decimals to the thousandths
- Identify, order and compare decimals to the thousandths
- Addition and subtraction of decimals
- Division with decimals in the dividend within the context of money

Geometry and Measurement

- Identify, describe and classify the properties and attributes of triangles, quadrilaterals and angles using congruency, parallelism and perpendicularity
- Similarity of triangles and rectangles
- Measure angles with tools

Functions and Algebra

Trimester 2

EM Units- 5, 6, 7, 8

Number and Operations

- Identify, order and compare equivalent fractions, improper fractions and mixed numerals
- Addition and subtraction of fractions and mixed numbers with unlike denominators
- Connect common fractions (½, ¼, ¾ and any number over 10, 100, 1000) to decimal equivalents
- Identify, order and compare percents
- Connect percents (10%, 25%, 50%, 75% and 100%) to fractions and decimals
- Estimation to solve problems and for reasonableness with fractions, decimals and percents
- Connect numerals to quantities using models, number lines and graphs for integers (positive and negative)
- Field properties (associative, identity and distributive)

Geometry and Measurement

- Identify, describe and compare 3-dimensional objects (triangular prism, cone and pyramids)
- Perimeter, area and volume using formulas and grids
- Build 3-dimensional models from 2- and 3-dimensional representations

Functions and Algebra

Data, Statistics and Probability

- Collect and record data using models, bar graphs, circle graphs and tables
- Determine most effective way to collect data and represent it
- Probability concepts
- Determine a fair game

Trimester 3

EM Units- 9, 10, 11, 12

Number and Operations

- Employ mental and estimation strategies to solve problems and determine reasonableness of situation

Geometry and Measurement

- Measure, solve problems and make conversions for time. Length, temperature, capacity, mass and weight using both standard and metric systems
- Interpret and give directions to plot points and find horizontal and vertical distances on a coordinate grid in all four quadrants.
- Graph ordered pairs in four quadrant
- Slide, flip, turn polygons across the x or y axis
- Measure accurately, solve problems, and make conversions using both standard and metric units
- Time to one minute interval
- Elapsed time to whole, half, quarter and 5 minute increments

Functions and Algebra

- Identify, extend and write rules for linear and non-linear patterns
- Use letters and symbols to represent unknown quantities
- Evaluate expressions using whole numbers
- Equivalency between two expressions
- Find a value that will make an open sentence true
- Use parentheses to simplify numerical expressions
- One and multi-step linear equations

Data, Statistics and Probability

- Analyze data to draw and justify conclusions, make predications and solve problems
- Analyze patterns, trends and distributions using mean, median, mode and range
- Display experimental probability data in bar, line graphs, line plots and tables